October 30, 1998

Mr. John W. Harrington Counsel for the EAA Blatt, Hammesfahr & Eaton 333 West Wacker Drive, Suite 1900 Chicago, IL 60606

Dear Mr. Harrington:

On August 26, 1996, you petitioned on behalf of the EAA Aviation Foundation, Inc., and the Experimental Aircraft Association, Inc. (collectively referred to as EAA), to permit EAA to operate its former military Boeing B-17 (B-17) aircraft, which is certificated in the limited category, for the purpose of carrying passengers on local flights in return for receiving donations. The EAA was issued Exemption No. 6541 on November 8, 1996, from Sections 91.315, 119.5(g), and 119.21(a) of Title 14, Code of Federal Regulations (14 CFR), to permit EAA to operate its B-17, which holds a limited airworthiness certificate, for the purpose of carrying its members for compensation or hire in its former military vintage airplane. That exemption expires on October 31, 1998.

In an effort to clarify the intent of the initial and recurrent training requirements for pilots in command (PICs) and seconds in command (SICs), to standardize the PIC and SIC ground-training requirements for all similar exemption holders, and to establish the content of the initial and recurrent ground-training program for PIC and SIC initial and recurrent qualifications as outlined below, the FAA has determined that it is in the public interest to amend the conditions and limitations of Exemption No. 6541. As a result of these revisions, seven new conditions and limitations have been added, and Condition Nos. 4, 5, 6, 7, 8, 9, 10, and 11 have been redesignated as Condition Nos. 10, 11, 12, 13, 15, 16, 17, and 18, respectively. In addition Condition No. 13 (formerly Condition No. 7) includes new paragraph 13(f).

New Condition No. 4 has been added and requires EAA to develop and maintain an initial and recurrent ground-training program for its PICs and SICs to include the following: general information and description of the aircraft; aircraft limitations; aircraft servicing; airspeeds; fuel system; electrical system; hydraulic system; engines; instruments and avionics; landing gear, brakes, controls, and flaps system; propeller; emergency procedures; weight and balance; performance planning; and use of the aircraft checklist.

New Condition No. 5 has been added and requires EAA to develop and maintain a written B-17 initial and recurrent flight-training program for its PICs to include the areas of operation and tasks listed in the Practical Test Standards for "Airline Transport Pilot and/or Type Rating Practical Test Standards," FAA-S-8081-5B. Additionally, it states that each PIC crewmember must receive this training and be found competent and proficient in these areas of operation and tasks before being assigned PIC responsibilities and duties.

New Condition No. 6 has been added and requires EAA to develop and maintain a written B-17 initial and recurrent flight-training program for its SICs, who must receive training on the maneuvers and procedures listed in the conditions and limitations.

New Condition No. 7 has been added and requires PICs to accomplish an initial proficiency check and a recurrent proficiency check every 12 calendar months after completion of initial training before being assigned PIC duties and responsibilities.

New Condition No. 8 has been added and requires SICs to accomplish an initial proficiency check and a recurrent proficiency check every 12 calendar months after completion of initial training before being assigned SIC duties and responsibilities.

New Condition No. 9 has been added and requires that EAA make its initial and recurrent ground- and flight-training programs available to the Milwaukee Flight Standards District Office (GL FSDO No. 13) upon request.

New paragraph (f) of Condition No. 13 (formerly Condition No. 7) includes a requirement that flight operations to be conducted at an airport that has a fire station or fire fighting services available.

New Condition No. 14 has been added to clarify the requirement specifically prohibiting any persons, other than the assigned flight crewmembers, from being in or gaining access to the flight deck area during flight operations.

In consideration of the foregoing, I find that a grant of exemption is in the public interest. Therefore, pursuant to the authority contained in 49 U.S.C. Sections 40113 and 44701, delegated to me by the Administrator (14 CFR Section 11.53), Exemption No. 6541 is hereby amended by revising the conditions and limitations and by extending its October 31, 1998, termination date to October 31, 2000, unless sooner superseded or rescinded. This exemption is subject to the following revised conditions and limitations:

1. EAA must maintain its B-17 aircraft in accordance with

the -

- a. Maintenance requirements as specified in its B-17 type specification sheet, as amended;
- b. FAA-approved maintenance inspection program that meets the requirements of Section 91.409; and
- c. B-17 military technical manuals.

2. The PIC must -

- a. Hold at least a commercial pilot certificate with a multiengine airplane rating, an airplane instrument rating, and a B-17 type rating;
- b. Have completed EAA's B-17 initial and recurrent ground and flight-training program within the previous 12 calendar months;
- c. Have at least a total of 2,500 hours of aeronautical flight experience, 1,000 hours of aeronautical flight experience in multiengine airplanes, and 25 hours in a B-17; or have at least a total of 1,000 hours of aeronautical flight experience, 200 hours of aeronautical flight experience in multiengine airplanes, and 100 hours and 50 takeoffs and 50 landings in a B-17; and
- d. Have accomplished three takeoffs and three landings to a full stop in a B-17 within the previous 90 days before serving as PIC.

3. The SIC must -

- a. Hold at least a commercial pilot certificate with a multiengine airplane rating and an airplane instrument rating;
- b. Have completed EAA's B-17 initial and recurrent flight and ground training program within the previous 12 calendar months;
- c. Have at least a total of 1,500 hours of aeronautical flight experience, 250 hours of aeronautical flight experience in multiengine airplanes; or have at least a total of 500 hours of aeronautical flight experience, 100 hours of aeronautical flight experience in multiengine airplanes, and 25 hours and 10 takeoffs and 10 landings in a B-17; and
- d. Have accomplished three takeoffs and three

landings to a full stop in a B-17 within the previous 90 days before serving as an SIC.

- 4. EAA must develop and maintain a written B-17 initial and recurrent ground-training program for its PICs and SICs that covers the training subjects listed below. Each PIC and SIC must receive this training and be found competent and proficient in training on the following:
 - a. General information and description of the aircraft;
 - b. Aircraft limitations;
 - c. Aircraft servicing;
 - d. Airspeeds;
 - e. Fuel system;
 - f. Electrical system;
 - g. Hydraulic system;
 - h. Engines;
 - i. Instruments and avionics;
 - j. Landing gear, brakes, controls, and flaps systems;
 - k. Propeller;
 - 1. Emergency procedures, including -
 - (i) Instruction in emergency assignments and procedures, including coordination among crewmembers;
 - (ii) Individual instruction in the location, function, and operation of emergency equipment, including -
 - A. First-aid equipment and its proper use; and
 - B. Portable fire extinguishers, with emphasis on the type of extinguisher to be used on different classes of fires;
 - (iii) Instruction in the handling of emergency situations, including -
 - A. Fire in flight or on the surface and

smoke control procedures with emphasis on electrical equipment and related circuit breakers found in cabin areas; and

- B. Illness, injury, or other abnormal situations involving passengers or crewmembers;
- m. Weight and balance;
- n. Performance planning; and
- o. Aircraft checklist.
- 5. EAA must develop and maintain a written B-17 initial and recurrent flight-training program for its PICs that covers the areas of operations and tasks listed in the practical test standards for "Airline Transport Pilot and/or Type Rating Practical Test Standards," FAA-S-8081-5B, and each PIC must receive this training and be found competent and proficient in those areas of operation and tasks before being assigned PIC responsibilities and duties in the B-17.
- 6. EAA must develop and maintain a written B-17 initial and recurrent flight-training program for its SICs that covers the maneuvers and procedures listed below. Each SIC must receive this training and be found competent and proficient in the following maneuvers and procedures before being assigned SIC responsibilities and duties:
 - a. Operational procedures applicable to the powerplant, equipment, and systems;
 - b. Performance specifications and limitations;
 - c. Normal, abnormal, and emergency operating procedures;
 - d. Three takeoffs and three landings to a full stop as the sole manipulator of the flight controls;
 - e. Engine-out procedures and maneuvering with an engine out while executing the duties of PIC; and
 - f. Crew resource management training.

In addition, each SIC must be familiar with the aircraft flight manual, placards, and markings.

7. Each PIC must complete a proficiency practical test upon completion of the initial training program and

upon completion of the recurrent training program (every 12 calendar months after completion of the initial training program) that covers the areas of operations and tasks listed in the "Airline Transport Pilot and/or Type Rating Practical Test Standards," FAA-S-8081-5B. Each PIC must be found competent and proficient in these areas of operation and tasks before being assigned PIC duties and responsibilities.

- 8. Each SIC must complete a proficiency practical test upon completion of the initial training program and upon completion of the recurrent training program (every 12 calendar months after completion of the initial training program) that covers the following maneuvers and procedures before being assigned SIC responsibilities and duties:
 - a. Operational procedures applicable to the powerplant, equipment, and systems;
 - b. Performance specifications and limitations;
 - c. Normal, abnormal, and emergency operating procedures;
 - d. Three takeoffs and three landings to a full stop as the sole manipulator of the flight controls;
 - e. Engine-out procedures and maneuvering with an engine out while executing the duties of PIC; and
 - f. Crew resource management training.

In addition, each SIC must be familiar with the aircraft flight manual, placards, and markings.

- 9. EAA's B-17 initial and recurrent ground- and flighttraining programs listed in Condition Nos. 4, 5, and 6, as appropriate, must be made available to the GL FSDO No. 13 upon request.
- 10. EAA must have the services of an FAA-certificated airframe and powerplant mechanic or an appropriately rated repair station available at all stopovers to perform all required maintenance inspections and repairs.
- 11. EAA will maintain the following information and records and will make those records available for review to the FAA when requested:
 - a. The name of each pilot crewmember EAA authorizes to conduct flight operations in its aircraft under the terms of this exemption;

- b. Copies of each PIC's and SIC's pilot certificate, medical certificate, qualifications, and recurrent training documentation in the B-17 to comply with Condition Nos. 2 and 3;
- c. Records of maintenance performed and maintenance inspection records to comply with Condition No. 1; and
- d. A listing of any incident, accident, or mechanical failure of the airframe, propellers, or engine that occurs during this exemption. That listing will include the date of the incident, accident, or failure; all information on the possible cause factors; and extent of injuries sustained.
- 12. Before permitting a person to be carried on board its aircraft for the purposes authorized under this exemption, EAA will inform that person that its aircraft holds a limited airworthiness certificate and that the FAA has authorized this flight under a grant of exemption from the requirements of Sections 91.315, 119.5(g), and 119.21(a). EAA also will explain the significance of a limited airworthiness certificate as compared to a standard airworthiness certificate. The explanation of the significance of a limited airworthiness certificate compared to a standard airworthiness certificate must include at least the following information:
 - a. The FAA has not established nor has it approved limited airworthiness certificated aircraft manufacturing standards. In contrast, standard category airworthiness certificated aircraft are manufactured to FAA-approved standards, including standards addressing the design of the aircraft and life-limited parts.
 - b. Limited category airworthiness certificates are issued when the FAA finds the -
 - (i) Aircraft previously has been issued a limited category type certificate and the aircraft conforms to that type certificate; and
 - (ii) Aircraft to be in a good state of preservation and repair and is in a safe operating condition.
 - c. Standard category airworthiness certificates are issued when the FAA finds the -

- (i) Aircraft has been built and maintained in accordance with that aircraft's type certification standards as established by the FAA; and
- (ii) Aircraft's inspection and maintenance requirements are in compliance with the applicable Federal Aviation Regulations.
- 13. All flight operations must be conducted
 - a. At a minimum operating altitude of not less than 1,000 feet above the ground (AGL);
 - b. Between the hours of official sunrise and sunset, as established in the "American Air Almanac," as converted to local time;
 - c. With a minimum flight visibility of not less than 5 statute miles;
 - d. With a minimum ceiling of not less than 2,000 feet AGL;
 - e. Within a 50-nautical-mile radius of the departure airport with landing permitted only at that departure airport; and
 - f. At an airport that has a fire station or firefighting services available.
- 14. No persons other than the assigned flight crewmembers may be permitted on the flight deck of the aircraft during flight operations.
- 15. Except for essential crewmembers, all flight operations must carry no more than the maximum number of passengers permitted by the aircraft's weight and balance limitations and number of FAA-approved seats in the aircraft.
- 16. Except for an emergency locator transmitter, EAA's aircraft must have the equipment listed in Section 91.205(b), and that equipment must be in an operable condition during the flight.
- 17. If the aircraft is to be operated over water and beyond the power-off gliding distance from shore, EAA's aircraft must have the equipment listed in Section 91.205(b)(11), and that equipment must be in an operable condition during the flight.
- 18. EAA must hold and continue to hold a determination from the U.S. Internal Revenue Service that it is a Section

501(c)(3) nonprofit, tax-exempt, charitable organization under Sections 509(a)(1) and 170(b)(1)(A)(vi) of the Internal Revenue Code.

This letter must be attached to, and is a part of, Exemption No. 6541.

Sincerely,

/s/ Richard O. Gordon Acting Director, Flight Standards Service